FEDERAL TRANSIT ADMINISTRATION

PROJECT MANAGEMENT OVERSIGHT PROGRAM

Contract No. DTFT60-04-D-00013
Project No. DC-27-5041
Task Order No. 10

CLIN 0003: Monitoring of Grantee
Subtask 12B: Specialized Monitoring Deliverable

Grantee: City and County of Honolulu

Honolulu High-Capacity Transit Corridor Project

Specialized Monitoring Deliverable - June 2007

By: **Booz Allen Hamilton**
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LIST OF ACRONYMS

AA	Alternatives Analysis
BAH	Booz Allen Hamilton
BFMP	Bus Fleet Management Plan
DB	Design/Build
DBB	Design/Bid/Build
DEIS	Draft Environmental Impact Statement
DOT	Department of Transportation
DTS	City Department of Transportation Services
EIS	Environmental Impact Statement
FD	Final Design
FFGA	Full Funding Grant Agreement
FMP	Fleet Management Plan
FTA	Federal Transit Administration
GET	General Excise Tax
HCTCP	High-Capacity Transit Corridor Project
HRT	Heavy Rail Transit
IC	InfraConsult, LLC
ITS	Intelligent Transportation Systems
LONP	Letter of No Prejudice
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
MOS	Minimum Operating Segment
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
PBQD	Parsons Brinckerhoff Quade & Douglas, Inc.
PE	Preliminary Engineering
PMO	Project Management Oversight
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PMSC	Project Management Support Consultant
QMP	Quality Management Plan
RFQ	Request for Qualifications
ROD	Record-of-Decision
SCC	Standard Cost Categories
SSCP	Safety and Security Certification Plan
SSMP	Safety and Security Management Plan
SSPP	Safety and Security Program Plan
SSOO	Sate Safety Oversight Office
TOD	Transit Oriented Development
UH	University of Hawai'i

I. MAJOR/ON-GOING ISSUES

The Honolulu High-Capacity Transit Corridor Project (HCTCP) is a twenty-nine (29) mile elevated fixed guideway rail system along O`ahu's south shore between Kapolei and the University of Hawai'i (UH) at Mānoa, including a spur to Waikiki. The proposed "First Project" constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Initial fleet size is anticipated to be 66 vehicles. There is currently no Full Funding Grant Agreement (FFGA) for this project.

At this time, the City and County of Honolulu (City) is actively pursuing an aggressive project schedule that calls for receiving approval to enter Preliminary Engineering (PE) *in October 2007*, Record-of-Decision (ROD) by mid 2009, start of construction by December 2009 *and Revenue Service for the first segment by December 2012*. The City *issued* an Request for Qualifications (RFQ) for the National Environmental Policy Act (NEPA)/Preliminary Engineering (PE) work on June 5, 2007 *(versus the planned date of June 1, 2007)* and *anticipates* executing a contract by August 15, 2007 *(versus a planned date of August 1, 2007*). The City *has combined* the activities needed to support NEPA into the PE contract with separate Notices to Proceed (NTPs). The first NTP would be for technical support to the Draft Environmental Impact Statement (DEIS) process, *including the development of project plans and procedures, evaluation of system alignment, station locations and technology, preparation of documentation needed for a competitive vehicle technology selection and procuring fixed guideway revenue vehicles; and conducting public involvement activities.* The second NTP would cover the PE effort needed once the Federal Transit Administration (FTA) has approved entry into PE.

The Project Management Oversight Contractor's (PMOC) *assessment* is that the overall project schedule *continues to be* exceedingly optimistic in response to the political mandate to have *the initial phase of the "First Project" (Phase I) in operation by December 2012*. As a result, the City will need to balance their political agenda with efficient project delivery methods. The City is contemplating implementing the project using an incremental approach. It is the City's intent to begin construction of Phase I after the ROD is issued using a Design/Build method of delivery with local funds. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu. Subsequent sections (phases) of the "First Project" could be opened as construction is completed; the final section of the "First Project" is scheduled for operation until 2017, five years after Phase I is placed into service. The City *continues to evaluate its options regarding project delivery*.

A fully integrated schedule for delivering First Project *still* needs to be developed in order to evaluate the overall project schedule and any potential impacts the construction of Phase I may have on the remaining project. *The City has been evaluating the schedule and delivery method, however, a 'final' schedule and delivery method will not be completed until the PE contractor is onboard.*

II. PROJECT DESCRIPTION

The Honolulu High-Capacity Transit Corridor Project (HCTCP) serves to improve mobility in the corridor between Kapolei and the University of Hawai`i (UH) at Mānoa on the island of O`ahu. The City and County of Honolulu (City) Department of Transportation Services (DTS), in coordination with the Federal Transit Administration (FTA), has performed an Alternatives Analysis (AA) to evaluate alternatives in this corridor, which serves the largest percent of population and employment in O`ahu. Four alternatives were evaluated in the AA process:

- No-Build
- Transportation System Management
- Managed Lanes
- Fixed Guideway

The AA report states the Managed Lane alternative studied two operational options, while the Fixed Guideway alternative reviewed several alignment options.

Alternatives Analysis (AA) was initiated in August 2005 and the AA report was presented to the Honolulu City Council in October 2006. In November and December 2006, public meetings were held on the Alternatives Analysis, and on December 22, 2006, the City Council selected the Fixed Guideway as the Locally Preferred Alternative (LPA). In selecting the Fixed Guideway as the LPA, the City Council left some areas/alignment open, to be decided on as the project progresses: West Kapolei, Salt Lake Boulevard vs. Airport alignment, and the Waikiki/UH at Mānoa branches. The total LPA alignment is approximately 29-miles long.

The City Council also identified and selected a minimum operable segment, (hereinafter "the First Project"), which would be built first with the current funding/revenue available. This "First Project" is a 20-mile alignment from East Kapolei, through Salt Lake Boulevard and downtown, and with an eastern terminus at the Ala Moana (Shopping) Center. The "First Project" does not include the alignment from West Kapolei to East Kapolei, or from Ala Moana Center to Waikīkī or to the UH at Mānoa.

With regards to funding, the State enabled legislation for a 0.5% General Excise Tax (GET) Surcharge and the City Ordinance enacted the GET Surcharge in July and August 2005, respectively. The GET Surcharge will be a source of revenue to build the corridor project. The GET surcharge went into effect on January 1, 2007 and has a limited duration with an end date of December 22, 2022.

The assumptions made for the Fixed Guideway in the AA report were:

- System will operate from 4 a.m. to 12 a.m., with 3-10 minute headways.
- Maximum speed will be 65 mph, in a fully dedicated right-of-way with dedicated vehicles, mainly on aerial/elevated guideway with columns in existing roadway medians, although at-grade may be possible at some areas.
- Guideway is less than 30 feet wide between stations, and approximately 50 feet plus vertical circulation at stations.
- Stations will be spaced approximately at every mile, and are approximately 270 feet long.

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- Cost to ride will be the same as "TheBus" with transfer available from one to the other.

Project Management Oversight Contractor

In March 2007, FTA assigned Booz Allen Hamilton (BAH) to serve as the Project Management Oversight Contractor (PMOC). The Project Management Oversight "kick-off" meeting for Honolulu's proposed High-Capacity Transit Corridor Project was convened on April 3, 2007, with representatives from the City and County of Honolulu, FTA and the PMOC, including Mayor Mufi Hannemann and members of his staff, representatives from Parsons Brinckerhoff Quade & Douglas (PBQD), the AA consultant, and from InfraConsult, LLC, (IC) the Project Management Support Consultant (PMSC) under contract with the City.

Key staff for this project are listed in the table below.

Name	Organization	Position/Title	Phone	Email
City and County of Honolulu				
Melvin Kaku	City – DTS	Director	808-768-8303	mkaku@honolulu.gov
Toru Hamayasu	City – DTS	Project Manager, Honolulu High-Capacity Transit Corridor Project.	808-768-8344	thamayasu@honolulu.gov
Phyllis Kurio	City – DTS	Transportation Planner	808-768-8347	pkurio@honolulu.gov
Faith Miyamoto	City – DTS	Environmental Planner	808-768-8350	fmiyamoto@honolulu.gov
FTA Region IX				
Leslie Rogers	FTA	Regional Administration	415-744-3133	leslie.rogers@dot.gov
Ed Carranza	FTA	Deputy Regional Administration	415-744-2741	edward.carranza@dot.gov
Nadeem Tahir	FTA	Director, Office of Program Management and Oversight	415-744-3113	nadeem.tahir@dot.gov
Catherine Luu	FTA	General Engineer	415-744-2730	catherine.luu@dot.gov
Booz Allen Hamilton (PMOC)				
Frank McCarron	BAH	PMOC Program Manager	703-625-9274	mccarron_francis@bah.com
Justine Belizaire	BAH	PMOC Task Order Manager	786-586-0026	belizaire_justine@bah.com

III. CURRENT REVIEW

On June 11-14, 2007, the PMOC met with members of the City DTS, along with members of the InfraConsult, LLC (IC) and Parsons Brinckerhoff Quade & Douglas, Inc. (PBQD) to discuss the *overall project schedule and delivery method, the RFQ for PE services and the numerous documents required by FTA to support a positive technical capacity and capability determination.*

The list of attendees for these meetings are included in this report as **Appendix A**. *The documents to support the technical capacity and capability determination and corresponding dates of delivery are listed in **Appendix B**.*

A. Project Schedule and Delivery

Overall, the City continues to evaluate the project schedule and delivery method. These key documents will continue to be reviewed/revised over the next several months. The City expects to have the firm selected for PE perform a schedule and delivery schedule review once they are onboard.

***Appendix C** presents the project schedule dates for key milestones as presented in April 2007 and the latest June 2007 schedule, as well as actual dates for completed milestones.*

General Observations:

- *The City issued a RFQ for the NEPA/PE work on June 5, 2007 and anticipates executing the contract by August 15, 2007.*
  - *The RFQ combines activities needed to support NEPA and then moving into the PE with separate NTPs. The first NTP will provide technical support for the DEIS process and the second NTP will cover the PE effort needed once the FTA has approved Entry into PE.*
  - *The City will seek a Letter of No Prejudice (LONP) to support this contracting effort. The schedule anticipates the LONP to occur at or around the same time as the ROD. Expectation for receiving the LONP at that time was questioned and discussed. It was suggested that once the City has selected a PE Contractor, a more detailed delivery schedule and delivery method discussion with FTA take place on the reasonableness of receiving a LONP at such an early stage in the project process.*

- *At this time, Phase I (Sections B & C) of the "First Project" is planned to be Design/Build using local funds only. Construction is scheduled to begin after an ROD is issued. The City wants something visible to happen on the project within five (5) years, including revenue operation by 2012.*

- *The City stated that the Navy Drum Site is the preferred location for the maintenance facility because of potentially fewer problems. The maintenance site would be constructed as part of Phase 1.*

- *The City is still reviewing phases and methods of design and construction for follow-on phases. It was suggested that the final design of additional line sections, D/E/F, could start earlier. The end result would be a longer time frame to do the work, but at a slightly higher cost while minimizing the risk. Multiple Design/Build Contracts could result in a lack of uniformity in both the Civil and the Systems portions of the project and could result in potential cost increases if coordination among the various contractors is not effectively monitored and controlled.*

- *The limits of Phase I (North-South Road to the vicinity of Waipahu) are not currently within the high-demand areas, although the UH West O`ahu campus would be completed before 2012.*

- *The City expects to place an order for 14 to 15 cars (minimum 6-8) for the first segment of operation. It was noted that the vehicles are not considered a critical path item. The current approach is to initiate two NTPs for the vehicle design, manufacture, delivery and testing. It was suggested by FTA and the PMOC that the technology selection could commence earlier in the schedule, affording additional time to develop the vehicle specifications.*

- *The Systems Design work was proposed using multiple contracts but there was discussion that perhaps a single contract would be of greater benefit.*

- *The final phases of work are scheduled to come on line by mid 2016, starting with Section D, followed by Section E in January 2017 and Section F by mid 2017, which is five (5) years after the first phase is operational.*

PMOC Concerns:

- *The PMOC expressed some concerns with regards to the current schedule. Overall, the schedule is optimistic. It appears to be politically driven, with a 'start of construction' by December 2009 and Phase I opening for revenue service by 2012. The City continues to look at balancing the political agenda with effective Project Delivery methods.*

Action Items:

- *The City should continue to monitor/develop the project schedule and delivery method. It is recognized that the City will be unable to finalize the project schedule and delivery method until after the award of the PE contract.*

B. RFQ for PE Services

General Observations:

- *The schedule and intended purpose of the RFQ for PE Services, as outlined in Section I, was discussed in detail. This discussion included the details and timing of both NTPs. It is the opinion of the PMOC that the selection process and duration are sufficient to make the best possible selection.*

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- *Each individual section of the RFQ was also discussed, with particular emphasis on Section 19.0, which covers Vehicle Technology and the Design/Build (DB) Contractor Selection Process. The selection of the vehicle technology is critical to both the EIS process and the PE effort. Both the vehicle type and specific supplier will be selected during this process. The RFQ appears to cover all of the required and necessary design functions, and with the Cost Plus Fixed Fee contract approach, it gives the City the ability to add additional scope and deliverables.*

- *The Project Completion Schedule was presented covering the project from the start of design activities through the start of revenue operations. It illustrated the City's intent to start construction of Phase I after the ROD is issued using the DB method of delivery, and integrated other key project schedule elements, including EIS activities, PE activities, and vehicle technology procurement. Key project milestones, such as Technology Selection, ROD, LONP, Final Design (FD) Authorization and FFGA were also discussed.*

- *The delivery method and packaging of the second phase of the project, covering Sections D, E and F, was also discussed. The current plan outlines a Design/Bid/Build (DBB) method of delivery for these segments, with each covering a 4-station territory. The critical need for detailed communication of design information from the Phase I DB effort to the FD effort for the remaining Sections was also discussed. The exact contract packaging of Sections D, E and F is also unclear at this time for both design and construction.*

- *Detailed discussion occurred regarding the timing of key project milestones and activity durations; however, the exact timing and interface between the ROD, LONP, FD milestones and the Preliminary Engineering and Phase I Design activities remains unclear. This is the key area of the project at this time.*

PMOC Concerns:

- *The City does not currently have a clear understanding of the exact timing of the LONP and activities that need to be accomplished during the PE phase in order for the LONP to be generated.*

- *The City does not currently have a clear understanding of the relationship between the ROD, LONP and the FD Authorization milestones, and the timing of each.*

- *There are concerns regarding the process that will be used to communicate specific design elements being developed by the DB contractor for Phase I to the FD consultants working on the FD for the Sections D, E and F, and the timing and oversight of the process.*

- *There are concerns regarding present gaps in the schedule for vehicle design,*

manufacture, delivery and test between Phase I and the remaining phases, and also for Systems Design, Supply, Install and Test.

- *There are general concerns that the schedule was developed by establishing milestones for the start of Phase I construction activities and completion of Phase I construction, and working backwards to establish dates for the EIS, PE and related activities. Concerns arise regarding the resultant durations for these activities.*

- *The City is not completely clear on the interrelationship between EIS and PE design activities, and the PE design elements that may need to be developed in greater detail to support risk assessment requirements.*

Action Items

- *The City will explore delivery method options and contract packaging options for Sections D, E and F.*

- *The City will request guidance from FTA in identifying the timing and interrelationships between the LONP, ROD, FD Authorization and related PE design activities at the appropriate time.*

- *The City will explore opportunities to eliminate gaps in the Vehicles and Systems procurement schedules.*

- *The City will specifically develop a communication process for communicating design information from the DB contractor for Phase I to the FD consultants for Sections D, E and F.*

C. Technical Capacity and Capability

General Observations:

- *The overall list of documents required by the grantee to demonstrate technical capacity and capability were reviewed. The current status of these documents is illustrated in* ***Appendix B*** *– Grantee Deliverables for Technical Capacity and Capability.*

- *The City delivered early drafts of the Project Management Plan (PMP) and the Bus Fleet Management Plans (BFMP) on June 12, 2007. A quick PMOC review of the plans indicated that the documents require significant work to bring them to an acceptable level. The specific level of information required in the plans was discussed with the City, including examples of how other grantees have addressed the functional areas. The level of information required was illustrated for several areas such as real estate, change orders and coordination of the various City departments. The PMOC emphasized that the PMP needs to clearly define how the City will in fact manage the PE effort. The PMOC indicated that they would send the City an example of a PMP and other documentation that have been approved by FTA for another project being developed by a City.*

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- *The PMOC shared copies of integrated project delivery schedules for technical capacity and capability documentation from other project to clearly illustrate what needed to be accomplished and the associated time frame. These schedules included required durations for PMOC and FTA to review.*

- *The schedule for delivery of the technical capacity and capability documentation was discuss from a perspective of the overall project delivery, and specifically from a perspective of when the City needs FTA approval to enter PE.*

- *The City indicated that they will continue to develop the PMP in-house. However, the remaining technical capacity documentation will be developed by the firm selected to do PE.*

PMOC Concerns

- *As discussed in the project schedule and delivery section of this report, the overall schedule for delivery of this project is still in the development stage. The specific timeline for FTA approval to enter PE is not fixed, hence, the required dates for submittal, review and approval of documentation to support a technical capacity and capability determination are still in a state of flux.*

Action Items

- *The City is to take a look at the overall project schedule and when FTA's approval to enter PE is needed. The City will then put together a schedule for delivering the technical capacity and capability documentation, including appropriate duration for FTA and PMOC review. The PMOC will then review the schedule and come to an agreement with the City on the schedule and how to best achieve it.*

- *The PMOC suggested a variety of methods to expedite the review and approval of the technical capacity and capability documentation. The suggestions include: workshops, review of sections of documents as they are developed, and the PMOC supplying the City with examples of approved documentation, such as PMP.*

D. Cost Validation

Draft Spot Report #1, Honolulu Cost Validation, dated May 2007, was issued to FTA for review on June 5, 2007. This draft report provides the analyses of the reasonability of the current project cost estimates for the Honolulu High-Capacity Transit Corridor Project and reflects the information conveyed at the exit discussion held with the City on May 10, 2007.

APPENDIX A – LIST OF MEETING ATTENDEES

Name	Organization	Position/Title	Phone	Email	Attendance		
					A	B	C
Mel Kaku	DTS	Director	808-768-8308	mkaku@honolulu.gov	x		
Toru Hamayasu	DTS	Project Manager, Honolulu High-Capacity Transit Corridor Project	808-768-8344	thamayasu@honolulu.gov	x	x	
Phyllis Kurio	DTS	Transportation Planner	808-768-8347	pkurio@honolulu.gov	x	x	
Faith Miyamoto	DTS	Environmental Planner	808-768-8350	fmiyamoto@honolulu.gov	x	x	
Mark Scheibe	PBQD	Project Manager – AA	808-566-2227	scheibe@pbworld.com	x		
Clyde Shimizu	PBQD	Sr. Supervising Civil Engineer	808-566-2210	shimizu@pbworld.com	x		
Donald R. Durkee	*PBQD*	*Subconsultant*	*202-537-0166*	*donalddurkee@sprintmail.com*	*x*	*x*	
Mike Schneider	InfraConsult	Project Principal	*808-536-6610*	schneider@infraconsultllc.com	x		
Simon Zweighaft	InfraConsult	Project Manager	*808-536-6610*	zweighaft@infraconsultllc.com	x	x	
William Stead	InfraConsult	Engineering	*808-536-6610*	stead@InfraConsultLLC.com	x	x	
Doug Tilden	InfraConsult	Architect Manager	808-536-6610	dtilden@InfraConsultLLC.com	x		
Sue Tilden	InfraConsult	Land Use Manager	808-536-6610	dtilden@InfraConsultLLC.com	x	x	
Wes Mott	InfraConsult	Finance and Admin. Manager	808-265-2225	mott@infraconsultllc.com	x		
Raymond Sukys	*FTA*	*Director of Planning, Region IX*	*415-744-2802*	*raymond.sukys@dot.gov*	*x*	*x*	
Frank McCarron	BAH / FTA	Associate, PMOC Program Manager	703-625-9274	mccarron_francis@bah.com	x	x	
Robert Mowry	BAH / FTA	Associate, PMOC Prog. Mgmt.	410-752-2632	mowry_robert@bah.com	x	x	
Justine A. Belizaire	BAH / FTA	Associate, PMOC Task Order Manager	786-586-0026	belizaire_justine@bah.com	x	x	
A. Scott Kiefer	BAH / FTA	Sr. Associate, PMOC Prog. Mgmt.	703-579-7738	Kiefer_a._scott@bah.com	x	x	

Meeting Attendance Legend:
A – *June 11, 2007 - Discussion of project schedule, method of delivery, and RFQ for PE*
B – *June 12, 2007 - Discussion of Technical Capacity and Capability*
C – *June 13, 2007 - Exit Discussion*

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APPENDIX B – GRANTEE DELIVERABLES FOR TECHNICAL CAPACITY AND CAPABILITY

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Technical Capacity and Capability To Enter PE – Grantee Checklist							
		Delivery Dates					
	Activity / Deliverable	April 2007 Submittal Date	Planned Submittal Date	Actual Submittal Date	FTA Review Comments Due	Revised Submittal Date	FTA Accepted
		mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy
1	Project Management Plan (PMP)	06/01/07	06/01/07	06/12/07			
2	Bus Fleet Management Plan (BFMP)	06/01/07	06/01/07	06/12/07			
3	Quality Management Plan (QMP)	06/18/07	TBD				
4	Real Estate Acquisition Management Plan (RAMP)	06/01/07 (part of PMP)	06/01/07 (part of PMP)				
5	Third-Party Agreement Plans	06/01/07 (part of PMP)	06/01/07 (part of PMP)				
6	Safety and Security Management Plan (SSMP)	TBD	TBD				
7	Safety and Security Certification Plan (SSCP)	TBD	TBD				
8	Risk Assessment (*To Be Determined)*	TBD	TBD				
9	Financial Plan		TBD				
10	Request to Enter Preliminary Engineering (PE)	07/01/2007	TBD				
11	Establish a State Safety Oversight Office (SSOO)		TBD				
12	Safety and Security Program Plan (SSPP)	TBD	TBD				

Revised 06/13/2007

APPENDIX C – OVERALL PROJECT SCHEDULE

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Project Schedule Analysis			
	SCHEDULE DATES		
Activity Description	**April 2007 Schedule**	**June 2007 Schedule**	**Actual**
RFQ – Advertise	06/01/2007	06/05/2007	**06/05/2007**
RFQ – Contract Award (NTP#1)	08/01/2007	08/15/2007	
Start Vehicle Procurement	4th Qtr 2008	08/15/2007	
Start Preliminary Engineering (NTP #2)	Mid 2007	10/2007	
Select Vehicle Technology	Mid 2007	Mid 2008	
Record of Decision (ROD)	Mid 2009	Mid 2009	
Start Utility Relocation		Mid 2009	
Start Right-of-Way Relocation and Acquisition	4th Qtr 2007	Mid 2009	
Start Phase I Design	4th Qtr 2009	3rd Qtr 2009	
Start Phase I Construction	4th Qtr 2009	1st Qtr 2010	
FD Authorization	1st Qtr 2009	3rd Qtr 2010	
Start Remaining Design	N/A	3rd Qtr 2010	
FFGA		3rd Qtr 2011	
Start Remaining Construction	N/A	3rd Qtr 2012	
Complete Phase I Construction	Mid 2012	Mid 2013	

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